WHAT IS CLAIMED IS:

1. An integrated graphic rendering system, wherein the
    system is connected to one or more users via a
    network, wherein each of the users has a console and
    an SGD production tool, the system comprising:

    a) one or more SGD handling agent, wherein each of
        the SGD handling agents is installed in the
        console, selectively extracts SGD from the SGD
        produced by the SGD production tool, transforms
        the extracted SGD into a predetermined format,
        compresses the transformed SGD, and outputs the
        compressed SGD to the network;

    b) an integrated rendering management server,
        wherein the integrated rendering management
        server has a 1:N signal connection with the SGD
        handling agents via the network, collects the SGD
        that are output from the SGD handling agents, and
        decompresses the collected SGD ; and

    c) a plurality of rendering execution tools, wherein
        the rendering execution tools have parallel
        signal connections with the integrated rendering
        management server;

    wherein the integrated rendering management server
    sends distributed rendering commands to the rendering

execution tools, monitors rendering execution status

of the rendering execution tools, and checks rendering

errors;

wherein each of the rendering execution tools performs

distributed rendering of the SGD under control of the

integrated rendering management server, creates

rendered data, and outputs the rendered data to the

integrated rendering management server; and

wherein the integrated rendering management server

collects and stores the rendered data.

2. The system of claim 1 wherein each of the SGD handling

agents comprises:

a) a selective SGD extraction module that selects

and extracts SGD that are essential for rendering

process from the entire SGD that are produced by

the SGD production tool;

b) an SGD transformation module that transforms the

SGD into a predetermined format; and

c) a compression management module that compresses

the SGD.

3. The system of claim 2 wherein each of the SGD handling

agents further comprises:

a) a communication security module that encrypts the SGD; and

b) a communication module that sends the SGD to the integrated rendering management server.

4. The system of claim 2 wherein the selective SGD extraction module comprises:

a) an SGD opening section that selectively opens the SGD produced by the SGD production tool;

b) an SGD analysis section that analyzes the SGD, and selectively extracts a predetermined key information;

c) an SGD parameter check section that checks the consistency of the key information;

d) an SGD extraction list generation section that selects SGD related to the key information among the entire SGD according to the check result of the SGD parameter check section, and creates an SGD extraction list based on the SGD selected to be extracted;

e) an SGD extraction section that extracts the selected SGD based on the SGD extraction list; and

f)   an SGD transmission list generation section that

creates an SGD transmission list for SGD, which

are required to be transmitted, based on the SGD

extracted by the SGD extraction section.

5.   The system of claim 4 wherein the selective SGD

extraction module further comprises an SGD extraction

management section that communicates with the SGD

handling controller, and controls the SGD opening

section, the SGD analysis section, the SGD parameter

check section, the SGD extraction list generation

section, the SGD extraction section, and the SGD

transmission list generation section.

6.   The system of claim 1 wherein the integrated rendering

management server comprises:

a)   a compression management module that manages

compression and decompression of the SGD;

b)   a rendering operation command management module

that has a signal connection with each of the

rendering execution tools, and selectively

commands the rendering operation of the SGD

according to the individual operation status of

the tool; and

c)   a rendered data check module that checks the integrity of rendered data that were output from the rendering execution tools.

7.   The system of claim 6 wherein the integrated rendering management server further comprises:

a)   a communication security module that manages the security of the SGD by performing encrypting and decrypting SGD;

b)   a communication state check module that checks the network operation status for the rendering execution tools and promptly reports any abnormality in the network operation status;

c)   a rendering error data check module that checks rendering error messages, and rendering warning messages that are sent by the rendering execution tools, and reports the results of the messages;

d)   a rendered data storage management module that receives, stores and manages the rendered data;

e)   an operation management module that selectively extracts operation information; and

f)   an accounting management module that monitors rendering cost occurrence for each user, and stores accounting data.

8. The system of claim 7 wherein the integrated rendering management server further comprises an integrated rendering management module that collects the SGD transmitted from the SGD handling agents, manages procedures for distributed rendering of the SGD, and controls the compression management module, the rendering operation command management module, the rendered data check module, the communication security module, the communication state check module, the rendering error data check module, the rendered data storage management module, the operation management module, and the accounting management module.

9. The system of claim 7 wherein the rendering execution tool comprises:

    a) a rendering management module that has a signal connection with the integrated rendering management server, and manages the rendering processes;

    b) a rendering execution engine that performs rendering routines to render the SGD thereby creating the rendered data;

    c) a data format transformation module that receives the rendered data that are output from the

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rendering execution engine, and transforms the
format of the rendered data to a predetermined
format;

d)   an operation tracking module that has a signal
connection with the rendering error data check
module of the integrated rendering management
server, and tracks and manages the rendering
status of each of the rendering execution
engines; and

e)   a transmission status check module that has a
signal connection with the communication state
check module of the integrated rendering
management server, and checks the status of the
network.

10.   The system of claim 1 wherein the rendering execution
tool comprises:

a)   a rendering management module that has a signal
connection with the integrated rendering
management server, manages the rendering
processes;

b)   a rendering execution engine that performs
rendering routines to render the SGD thereby
creating the rendered data; and

c)   a data format transformation module that receives

the rendered data that are output from the

rendering execution engine, and transforms the

format of the rendered data to a predetermined

format;

wherein the rendering management module controls the

rendering execution engine, and the data format

transformation module.

11. A method for integrated graphic rendering, wherein one

or more user consoles having SGD production tools are

connected to an integrated rendering management

server, wherein a plurality of rendering execution

tools are connected to the integrated rendering

management server, the method comprising:

i)   a console-side rendering target data handling

process; and

ii) a server-side rendering target data handling

process;

wherein the console-side rendering target data

handling process comprises:

a)   deciding whether an SGD rendering order event has

been occurred;

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b)   selectively opening SGD that were produced by the

SGD production tool when it is decided that an

SGD rendering order event has occurred;

c)   analyzing the opened SGD and extracting

predetermined key information;

d)   checking the consistency of the key information;

e)   selecting SGD that are to be extracted according

to the key information when it is decided that

the key information is consistent;

f)   creating an SGD extraction list that incorporates

the particulars of the selected SGD;

g)   selectively extracting SGD based on the SGD

extraction list; and

h)   transmitting the SGD to the integrated rendering

management server.

12. The method of claim 11 wherein the console-side

rendering target data handling process further

comprises between the step of selectively extracting

SGD and the step of transmitting the SGD:

a)   checking client-side rendering options;

b)   creating an SGD transmission list based on the

extracted SGD and the client-side options;

c)   transforming the SGD into a predetermined format;

d)   compressing the SGD; and

e)   encrypting the SGD.

13.   The method of claim 12 wherein the server-side rendering target data handling process comprises:

a)   deciding whether an event of SGD input has been occurred;

b)   decrypting and decompressing the SGD;

c)   authenticating of the user;

d)   selectively sending commands to the rendering execution tools according to the operation status of the individual rendering execution tools;

e)   checking the operation status of the rendering execution tools and deciding whether rendered data have been output from the rendering execution tools;

f)   checking the integrity of the rendered data, and deciding whether there is a rendering error;

g)   storing the rendered data;

h)   compressing and encrypting the rendered data; and

i)   transmitting the rendered data.

14.   The method of claim 11 wherein the server-side rendering target data handling process comprises:

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a) deciding whether an event of SGD input has been occurred;

b) selectively sending commands to the rendering execution tools according to the operation status of the individual rendering execution tools;

c) checking the operation status of the rendering execution tools and deciding whether rendered data have been output from the rendering execution tools; and

d) checking the integrity of the rendered data, and deciding whether there is a rendering error.

15. The method of claim 14 wherein the server-side rendering target data handling process further comprises between the step of deciding whether an event of SGD input has been occurred and the step of selectively sending commands to the rendering execution tools:

a) decrypting and decompressing the SGD; and

b) authenticating of the user.

16. The method of claim 15 wherein the server-side rendering target data handling process further

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comprises after the step of checking the integrity of the rendered data:

a)   storing the rendered data;

b)   compressing and encrypting the rendered data; and

c)   transmitting the rendered data.

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